

Appl. No. 10/523,780

Amendment dated December 21, 2007

Reply to Office Action of September 25, 2007

REMARKS

In the September 25, 2007 Office Action, claims 1-9 stand rejected in view of prior art. Claims 1-9 were objected to and Claims 1 and 2 were rejected for failing to indicate and claim particularly and distinctly the subject matter that Applicant regards as the invention. No other objections or rejections were made in the Office Action.

Status of Claims and Amendments

In response to the September 25, 2007 Office Action, Applicant has amended claims 1 and 2 as indicated above. Thus, claims 1-9 are pending, with claims 1 and 2 being the only independent claims. Reexamination and reconsideration of the pending claims are respectfully requested in view of above amendments and the following comments.

Claim Objections

In paragraph 1 of the Office Action, claims 1-9 were objected to as a result of informal language in claim 1 and 2. In response, Applicant has amended claims 1 and 2 accordingly.

Claim Rejections - 35 U.S.C. §112

In paragraph 3 of the Office Action, claims 1 and 2 were rejected under 35 U.S.C. §112, second paragraph. In response, Applicant has amended claims 1 and 2 accordingly.

Specifically, the terms "or higher" and "or lower" have been deleted from the claims.

Applicant believes that the claims now comply with 35 U.S.C. §112, second paragraph.

Withdrawal of the rejections is respectfully requested.

A) Rejections - 35 U.S.C. § 103

In paragraphs 4-5 of the Office Action, claims 1, 4 and 5 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,662,569 (Sami et al.) in view of Japanese Patent Document JP 2002-162126A (Akira et al.). In response, Applicant has amended independent claim 1 in order to clarify the claimed subject matter, as mentioned above.

More specifically, independent claim 1 recites an air conditioner that includes a plurality of utilization units and a vapor compression type refrigerant circuit. Claim 1 also requires that the plurality of utilization units are ***operably connected in parallel and are configured and arranged for heat exchanging***. Claim 1 further requires that the vapor compression type refrigerant circuit include a high pressure unit with a heat exchanger and be operably coupled to the plurality of utilization units. Claim 1 goes on to require that the vapor compression type refrigerant circuit be configured and arranged for flowing a high-pressure refrigerant within the high pressure unit at a maximum working pressure of at least 3.3 MPa and a low pressure unit configured and arranged for flowing only a low-pressure refrigerant within said low pressure unit at a maximum working pressure of no greater than 3.3 MPa. Claim 1 still further requires that the low pressure unit include an accumulator configured and arranged for pooling the low pressure refrigerant that circulates inside said vapor compression type refrigerant circuit as a liquid refrigerant. Finally, claim 1 requires

that the refrigerant that flows through the low pressure unit and the high pressure unit be one of a pseudo azeotropic refrigerant, an azeotropic refrigerant, and a single refrigerant having saturation pressure characteristics higher than the saturation pressure characteristics for R407C.

This arrangement is *not* disclosed or suggested by the Sami et al. patent, the Akira et al. patent document or any other prior art of record. Rather, Sami et al. discloses a refrigeration apparatus that includes a compressor 22, a single condenser 24 and a single evaporator 28. Claim 1 requires a plurality of utilization units that exchange heat within a corresponding plurality of living spaces. Akira et al. similarly discloses an air conditioner system that has a single outdoor heat exchanger 3 and a single indoor heat exchanger 32. Consequently, Akira et al. and Sami et al. teach away from the basic structure required by claim 1.

Further, while Akira et al. mention features of R410A refrigerant, neither Sami et al. nor Akira et al. suggest or disclose a system whereby *refrigerant flows through the high pressure unit at a maximum working pressure of at least 3.3 MPa*. Mention of a property is not a disclosure of structure. It is well settled in U.S. patent law that the mere fact that the prior art can be modified does *not* make the modification obvious. Accordingly, the prior art of record lacks any suggestion or expectation of success for combining the patents to create the Applicant's unique arrangement.

More specifically, even if the system disclosed in the Sami et al. patent were somehow modified to include features of the Akira et al. patent, such a system would still fail to meet the claims of the present invention.

Moreover, Applicant believes that the dependent claims 4 and 5 are also allowable over the prior art of record in that they depend from independent claim 1, and therefore are allowable for the reasons stated above. Also, the dependent claims 4 and 5 are further allowable because they include additional limitations. Thus, Applicant believes that since the prior art of record does not disclose or suggest the invention as set forth in independent claim 1, the prior art of record also fails to disclose or suggest the inventions as set forth in the dependent claims.

Therefore, Applicant respectfully requests that this rejection be withdrawn in view of the above comments and amendments.

B) Rejections - 35 U.S.C. § 103

In paragraph 6 of the Office Action, claims 2-3 and 6-9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sami et al. in view of Akira et al. and in further view of U.S. Patent No. 5,526,649 (Sada). In response, Applicant has amended independent claim 2 in order to clarify the claimed subject matter, as mentioned above.

More specifically, claim 2 recites features of an air conditioner that includes a compressor, a heat source side heat exchanger configured and arranged to operate as at least one of an evaporator and a condenser, a plurality of utilization side heat exchangers mutually connected in parallel to one another and further connected to the heat source side heat exchanger, expansion mechanisms connected between the utilization side heat exchangers and the heat source side heat exchanger a switching mechanism and an accumulator connected between the switching mechanism and an inlet side of the compressor. Claim 2

also requires that the accumulator be configured and arranged for pooling low-pressure refrigerant as a liquid refrigerant. Claim 2 further requires that the accumulator, the switching mechanism and the inlet side of the compressor form a low pressure unit, which is configured and arranged for flowing only low-pressure refrigerant at a maximum working pressure of no more than 3.3 MPa. Claim 2 goes on to require that the compressor, the heat source side heat exchanger, the plurality of utilization side heat exchangers, and the switching mechanism form a high pressure unit, which is configured and arranged for flowing high-pressure refrigerant at a maximum working pressure of at least 3.3 MPa. Finally, claim 2 requires that the refrigerant that flows through the low pressure unit and the high pressure unit being one of a pseudo azeotropic refrigerant, an azeotropic refrigerant, and a single refrigerant having saturation pressure characteristics higher than the saturation pressure characteristics for R407C.

This arrangement is *not* disclosed or suggested by the Sami et al. patent, the Akira et al. patent document, the Sada patent or any other prior art of record.

Applicant incorporates herein the comments above with respect to Sami et al and Akira et al. and the rejection of independent claim 1. While Akira et al. mentions features of R410A refrigerant, neither Sami et al., Akira et al. nor Sada suggest or disclose a system whereby *refrigerant flows through the high pressure unit at a maximum working pressure of at least 3.3 MPa*. It is well settled in U.S. patent law that the mere fact that the prior art can be modified does *not* make the modification obvious. Accordingly, the prior art of record lacks any suggestion or expectation of success for combining the patents to create the Applicant's unique arrangement.

Moreover, Applicant believes that the dependent claims 3 and 6-9 are also allowable over the prior art of record in that they depend from independent claim 2, and therefore are allowable for the reasons stated above. Also, the dependent claims 3 and 6-9 are further allowable because they include additional limitations. Thus, Applicant believes that since the prior art of record does not disclose or suggest the invention as set forth in independent claim 2, the prior art of record also fails to disclose or suggest the inventions as set forth in the dependent claims.

Therefore, Applicant respectfully requests that this rejection be withdrawn in view of the above comments and amendments.

Prior Art Citation

In the Office Action, additional prior art references were made of record. Applicant believes that these references do not render the claimed invention obvious.

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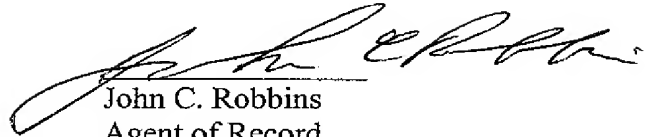
In view of the foregoing amendment and comments, Applicant respectfully asserts that claims 1-9 are now in condition for allowance. Reexamination and reconsideration of the pending claims are respectfully requested.

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Respectfully submitted,

A handwritten signature in black ink, appearing to read "John C. Robbins", is written over a horizontal line.

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Dated: Dec. 21, 2007

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